
Information Item

California Postsecondary Education Commission

Issues and Challenges Confronted by Postsecondary Education Institutions in Providing Increased Postsecondary Education Opportunities to Residents of Superior California

The 2001-02 State Budget contained a provision requesting the Commission to conduct a study of the “higher education needs of Superior California.” The primary impetus for this study was the lack of postsecondary education opportunities for residents in the northernmost inland region of the State. Since February 2002, Commission staff has been working in consultation with regional representatives to fulfill this budgetary request by: (1) analyzing the current barriers that exist in providing postsecondary education opportunities within the Superior California region; (2) developing options and recommendations for reducing those barriers and increasing their postsecondary education opportunities; and (3) forwarding those policy recommendations to the Governor and Legislature.

The attached report – in draft form and still under review and consultation with regional representatives – is designed to respond to the 2001-02 budget language and is provided today for information and discussion.

Commission staff has two additional meetings planned with regional representatives to finalize the draft report; these meetings are scheduled for October 2 and October 30 in Redding, California. At the October 8th Commission meeting, staff will update the Commission on the discussions and outcomes from its October 2 meeting with regional representatives, and will provide a summary of the current draft report.

Staff plans to revise the draft report based on community feedback and to present a final document to the Commission for its action at the December Commission meeting. Staff also anticipates that the final report will include policy recommendations for the Governor and Legislature to consider.

The attached draft report: (1) provides the context for this work and background on the Superior California region; (2) identifies the current barriers that exist in providing postsecondary education opportunities within the Superior California region; and (3) highlights options that could be implemented to expand education opportunities available in Superior California.

While the report’s primary focus is on Superior California, the options and recommendations have implications and utility for other regions of the State as well.

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Issues and Challenges Confronted by Postsecondary Education Institutions in Providing Increased Postsecondary Education Opportunities to Residents of Superior California

*A Report to the Governor and Legislature
in Response to State Budget Act of 2001-02*



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Background

The State Budget Act of 2001-02 passed by the Legislature and signed by the Governor included an appropriation of \$50,000 to the California Postsecondary Education Commission to “conduct a study of the higher educational needs of the students in Superior California.”

Lacking any further detail or legislative and budgetary language, the Commission staff subsequently met with Assemblymember Richard Dickerson, who represents parts of Colusa, Glenn, Shasta, Siskiyou, Sutter, Tehama, Trinity, and Yolo counties, to better understand the general purpose for the directive. In addition, Commission staff sought a better understanding of the problem that the language and funding are intended to address as well as the expected outcomes.

It was clear that the Assembly Member, as well as many others, were concerned about the lack of postsecondary education opportunities for residents in the northernmost inland region of California. They also were interested in the Commission’s analysis of the barriers that currently exist as well as any recommendations that could be provided to members of the Legislature and Governor.

The Commission sought to begin its examination with a review of efforts that had already been undertaken or were currently in progress to understand the postsecondary education needs of the residents of Superior California. To that end, a report issued by MGT of America, Inc. (sponsored by the McConnell Foundation in December 2001) provided a solid basis for the beginning of the Commission’s examination. The McConnell Foundation is a private, independent foundation established in 1964. Its mission is to help build better communities through philanthropy. The Foundation provides grant funds to qualified nonprofit, tax-exempt organizations, government agencies, and public schools in Shasta and Siskiyou Counties.

The Commission’s efforts were intended to build upon, not duplicate, those of the McConnell Foundation and MGT. More information about the findings of the MGT report is provided later in this document and a copy of the executive summary of the report is included as Appendix A.

Recognizing that much had already been done to examine the particular needs of this region of California, and desiring to expand upon those efforts, the Commission convened a broad spectrum of individuals representing postsecondary education institutions to discuss the challenges they face in serving residents of the northernmost California counties. These individuals represented both individual campuses and the systemwide offices of the California Community Colleges, the California State University, the Univer-

sity of California, and private colleges and universities. In addition, because of their importance and proximity to the region, three Oregon institutions also participated in the discussions. A list of the participants to the working group is included as Appendix B. In addition, the McConnell Foundation served a critical role in supporting the work of the Commission, providing contextual information on the efforts and activities already undertaken in the region, and generously providing their facilities for the working group discussions.

The Commission first convened the discussion group in February 2002 at the McConnell Foundation offices in Redding, California. In the months since, several subsequent meetings have been held. The primary objectives of these discussions were not only to identify the challenges of serving the residents of Superior California -- given its rural nature, its particular economic base, and populations -- but also to identify existing State-level policy and fiscal barriers that may prevent the expansion of educational opportunities to residents of the region. While local and institutional barriers to educational opportunity definitely exist -- particularly with regard to geographic accessibility -- the Commission's primary charge is to consider State-level factors that may bear on the larger public debate regarding the educational service needs of Superior California. As a result, these discussions and the recommendations that result serve a narrow, but important purpose.

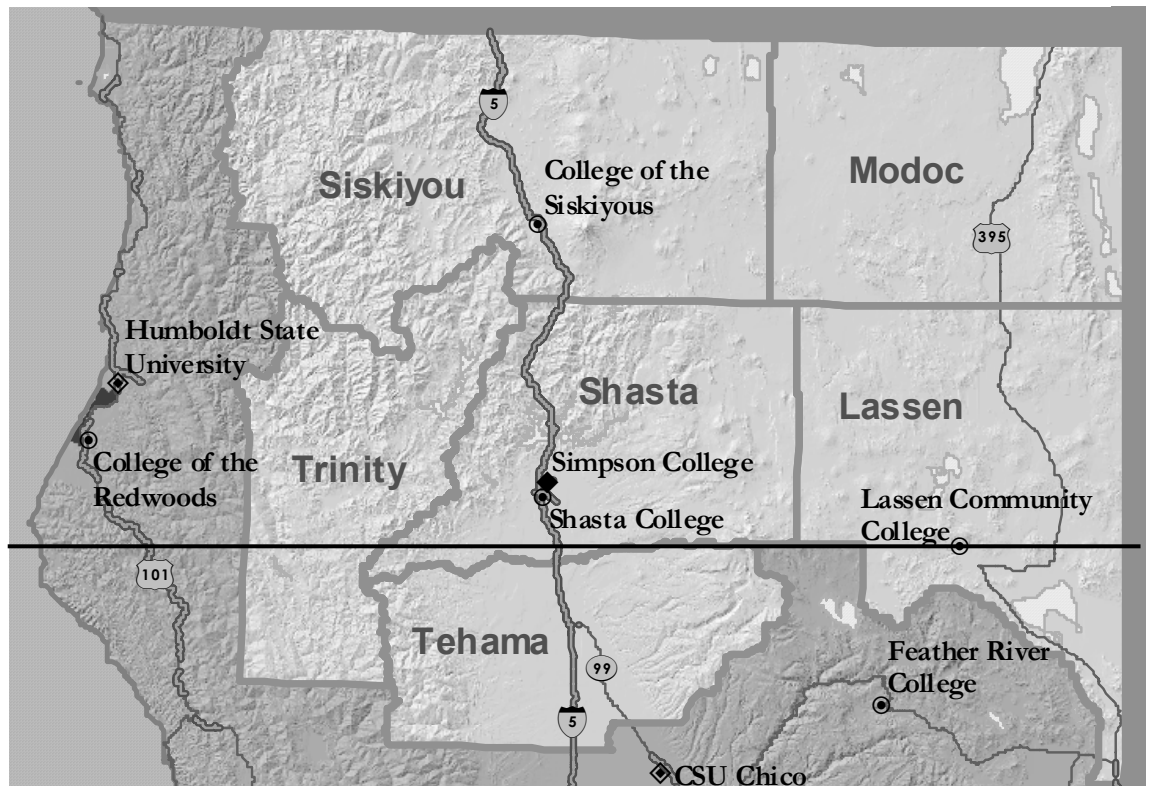
2

Superior California, The Regional Context

General description of the region

The Budget Act language requesting this report failed to include a definition of “Superior California.” Absent that legislative direction, and a commonly accepted definition of what territory Superior California includes, the Commission has, for the purposes of this report, defined “Superior California” as the six-county area of northern California that includes Shasta, Siskiyou, Trinity, Lassen, Modoc, and Tehama Counties. The data presented in this report are based on these six counties. Several maps of these counties and their surrounding jurisdictions are presented below as Displays 1-3.

DISPLAY 1 Topographical Map of the Superior California Study Area, with Existing Colleges and Universities, and Major Freeways Indicated.



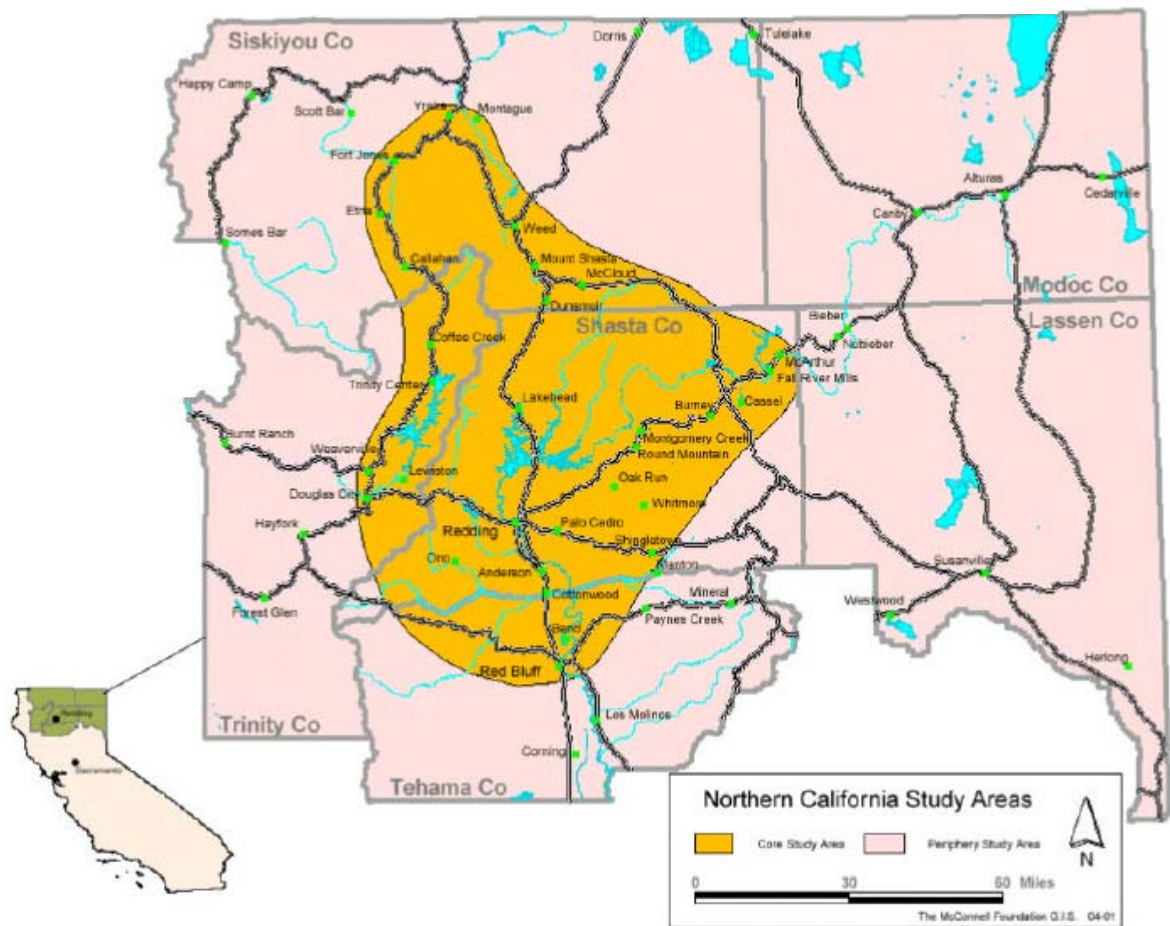
Source: California Postsecondary Education Commission

Display 1 shows a topographical map of the area with the locations of five community colleges (Feather River, Lassen, Redwoods, Shasta, and Siskiyous), two State University campuses (Chico and Humboldt), and the sole private college in the region (Simpson). The region includes the six counties that served as the focus of the analysis of the MGT report, but also included a number of counties in the surrounding area. It is noteworthy that of the

colleges and universities shown, only three of the five community colleges, and none of the State University campuses, are in the six-county study area. The map also indicates the mountainous nature of the region, and the natural barriers that make travel difficult to western areas in particular.

Displays 2 and 3 were presented in the MGT report. Display 2 shows the primary study area that includes Shasta County and Lake Shasta at its center. This is where about half of the population of the six-county region resides. Display 3 is a demographic map showing the major population concentrations of the area. The largest cities in the area are Redding and Red Bluff, with smaller towns from Corning to Yreka spread along the Interstate 5 corridor running south to north.

DISPLAY 2 Primary Study Area Within Six Superior California Counties



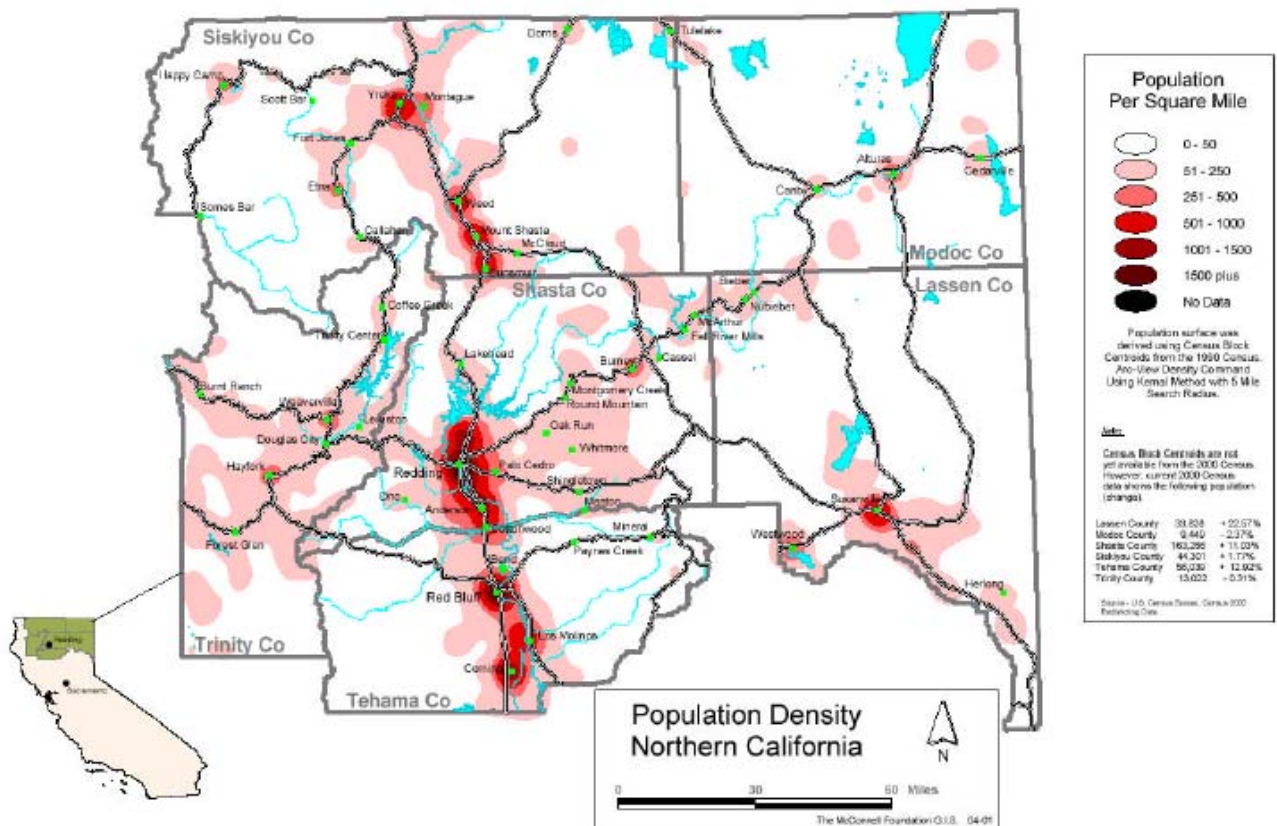
Sources: The McConnell Foundation Geographic Information System, 2001; MGT of America, p. 1-4.

The educational and economic development needs of these northern California counties have been the subject of numerous studies over the past several years. However, in spite of the information and understanding gained from

those studies, little has changed either educationally or economically in the Superior California region.

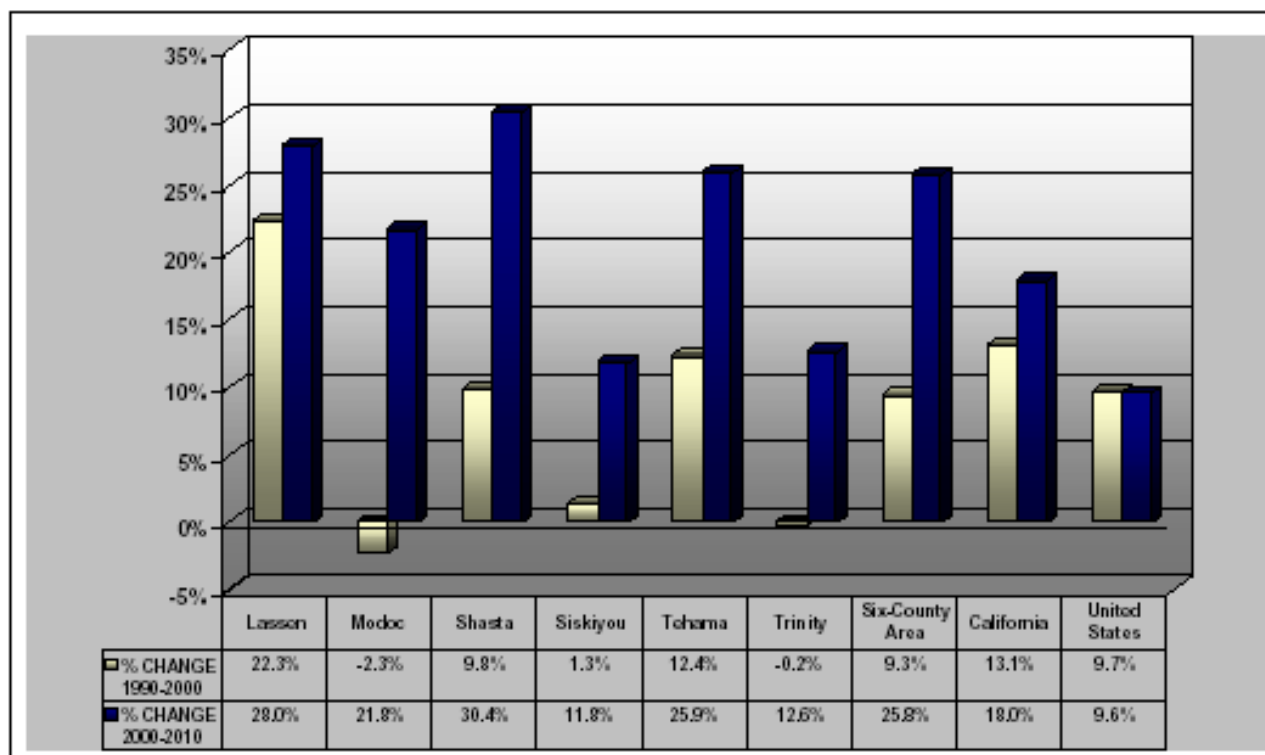
In February 2000, in an effort to address the need to enhance and increase higher education opportunities in northern California, the McConnell Foundation brought together community leaders and higher education representatives to begin a series of discussions about the higher education needs of the area. The McConnell Foundation is a private, independent foundation – its mission is to help build better communities through philanthropy. A committee of higher education administrators from Shasta College; College of the Siskiyous; California State University, Chico; and Southern Oregon University met regularly and determined a need for the following information:

DISPLAY 3: Population Density Map of Core and Periphery Study Areas, 1990 Census Data



Source: McConnell Foundation GIS Department, 2001; MGT of America, p. 2-2.

DISPLAY 4 Actual and Projected Percentage Changes in Population in Six Superior California Counties, California, and the United States, 1990-2000 and 2000-2010.



*Population data for 1990 are July estimates based on 1990 Census (conducted in April). Population data for 2000 are decennial census figures. 2010 Projections for California and the six-county area are from the California Department of Finance Demographics Research Unit (DOF); projections for the nation are from the U.S. Census Bureau. DOF projections have not been updated to reflect 2000 census data.

Source: MGT of America, p. 2-6.

- ♦ Higher education learning needs of current, potential, and future students;
- ♦ Current, potential, and future workforce needs for employers (including analysis of the impact of increased higher education opportunities on workforce needs); and
- ♦ Community higher education needs.

In August 2001, the McConnell Foundation, with contributions from its higher education partners, contracted MGT of America, Inc. (MGT) to conduct an assessment of higher education needs in northern California. During fall 2001, MGT conducted an employer survey along with interviews and focus groups involving students, employers, employees, community leaders, and other area stakeholders.

Population and demographics

The focus of MGT's assessment included the six-county area of northern California: Shasta, Siskiyou, Trinity, Lassen, Modoc, and Tehama Counties.

Within this six-county region, the higher education partners identified a core study area, which includes most of Shasta County and the most heavily populated areas within Tehama and Siskiyou counties to the south and north, respectively. The entire six-county study area includes 320,000 residents and spans approximately 100 miles from north-to-south and 120 miles from east-to-west. The geography of this area (see Display 1) makes it difficult to travel and contributes to the inability for some to access educational services.

MGT noted that the population projections developed by the Demographic Research Unit of the Department of Finance (DRU) have not been revised to include the 2000 census, and appear to have exaggerated potential regional growth by a considerable margin. Specifically, MGT noted as follows:

Overall, the six-county area is projected to grow at a much faster rate (25.8%) in the current decade than it did between 1990 and 2000. As of November 2001, however, the data published by DOF had not been updated to reflect 2000 Census figures. Published DOF estimates of population throughout the 1990s were significantly higher than actual growth as reported by the Census Bureau through 2000. Consequently, any projections based on estimates prior to the release of 2000 Census data have not proven reliable (MGT, p. 2-5).

MGT goes on to state (MGT, Exhibit 2-3):

Beginning in 1998, DOF estimates started to depart radically from the revised census figures. This is especially true in the case of Modoc County, in which population was projected to grow steadily throughout the 1990s and beyond. However, population in that county actually declined between 1990 and 2000. Hence, while DOF projections are provided for lack of more accurate data, it is likely that actual growth will be slower than indicated (MGT, p. 2-6,7).

DRU projects a six-county population of 403,000 by 2010, but given the considerable shortfall in earlier projections, it seems far more likely that the region will add only 30,000 people through 2010, not the approximately 74,000 projected by DRU. Display 4 on the previous page, from the MGT report, shows clearly how actual growth rates in the 1900s were far less than projected rates in the first decade of the 2000s.

Demographically, it is fair to describe the Superior California study area as older, less ethnically diverse, and poorer than California or the nation as a whole. The average age is four years older than the State average, and the under 24 population -- the primary college-going age group -- has actually declined as a percentage of the overall population. According to MGT, the average per capita income in the region was \$21,036 in 1999 compared to a State average of \$29,856 and a national average of \$28,546 (MGT, p. 2-11). The 2000 census reported the racial/ethnic distribution of the six-county region to be as shown in Display 5 below.

DISPLAY 5 Comparison of the Racial/Ethnic Composition of Superior California, the State of California, and the United States, 2000

Racial/Ethnic Group	Superior California (Six Counties)	California	United States
White, Non-Hispanic	82.8%	46.7%	69.1%
Hispanic/Latino	8.6	32.4	12.5
African-American	1.7	6.7	12.3
Asian/Native Hawaiian/ Pacific Islander	1.5	11.2	3.7
Other	5.4	3.0	2.4
Total	100.0%	100.0%	100.0%

Education In general the MGT study found that participation in postsecondary education lags behind statewide levels and that considerable growth exists for educational services. Specifically, the proportion of individuals in the study area obtaining associate degrees was slightly higher than the statewide and national averages (7.8% compared to 7.9% in California and 6.2% nationally), while bachelor degree attainment fell well below these comparative benchmarks, with a six-county average of 12.3% compared to 23.4% statewide, and 20.3% in the country as a whole. As the number of high school graduates as a proportion of 12th grade enrollment has increased slightly, on average, within the six-county area, the participation of high school graduates in postsecondary education has also increased, from 29% to 39% from 1990 to 1999. Although there has been strong growth in postsecondary education participation in the area of study over the past five years, the six-county participation rate of 30% still lags far behind the statewide rate of 54%.

In offering these statistics, however, it should be noted that the data are over ten years old, since there are no updates yet available from the 2000 census. Nevertheless, the possibility of a dramatic increase in the percentage of the population with baccalaureate degrees seems slight, since the primary reason for the deficiency reported in 1990 has not changed; the absence of public four-year institutions and baccalaureate-degree programs in the region.

Far more recent data are to be found in the Commission's *Student Profiles* report, which contains data on college-going rates for all of California's 58 counties (CPEC Report No. 00-8) for the year 2000. As can be seen in Display 6, participation rates to the Community Colleges mirror State norms, while attendance at the University of California and the California State University are half or less of statewide averages.

DISPLAY 6: College-Going Rates to the University of California, the California State University, and the California Community Colleges, 2000 Series

County	Total High School Graduates	University of California		California State University		California Community Colleges		Independent Institutions		Grand Totals	Pct.
		No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.		
Lassen	329	6	1.8%	5	1.5%	97	29.5%	4	1.2%	112	34.0%
Modoc	156	2	1.3%	3	1.9%	12	7.7%	1	0.6%	18	11.5%
Shasta	2,011	71	3.5%	106	5.3%	634	31.5%	31	1.5%	842	41.9%
Siskiyou	508	18	3.5%	35	6.9%	68	13.4%	9	1.8%	130	25.6%
Tehama	628	17	2.7%	54	8.6%	206	32.8%	4	0.6%	281	44.7%
Trinity	162	7	4.3%	13	8.0%	44	27.2%	0	0.0%	64	39.5%
Total State	340,410	25,798	7.6%	34,367	10.1%	98,593	29.0%	8,231	2.4%	166,989	49.1%
Six County Area	3,794	121	3.2%	216	5.7%	1,061	28.0%	49	1.3%	1,447	38.1%

Source: California Postsecondary Education Commission, Report No. 00-8

The reason for this is clearly the distance from public four-year institutions. It has long been a principle within higher education -- and with regard to countless other public services -- that "proximity is destiny." From the Commission's college-going rates surveys over the years, the principle of higher attendance rates in the vicinity of college and university campuses has been affirmed repeatedly. This also explains why attendance at community colleges is similar to statewide averages; there are three community colleges near the major population centers.

Employment and demand for educational services

MGT included a display (MGT, Exhibit 2-15) that suggests moderate growth in employment demand between 1997 and 2004, yet included a serious caveat:

Exhibit 2-15 presents an overview of total employment by the major Occupational Employment Statistics (OES) classifications. Estimations from 1997 and projections of 2004 employment are presented in this exhibit. Because these projections are based on trends dating prior to 1998, they should be interpreted with caution. The nationwide economic downturn that began in 1999–2000 is not accounted for within these data. Therefore, it is likely that these projections are overstatements of actual employment growth in the areas depicted (MGT, p. 2-21).

Given this situation, and assuming no major changes are made to the economic or educational circumstances of the region, it is probable that both employment and economic growth will be slow at best, with the real possibility that there will be no employment growth at all from pre-recession levels. Certainly, California as a whole has suffered in the past few years, and there is little reason to suppose that Superior California has been exempted from the negative forces that have affected the State as a whole.

Nevertheless, just as the principle of “proximity is destiny” affects college-going rates, so also does the existence of college and university programming have a positive economic -- as well as educational -- effect on a given region. Through various economic impact studies conducted over the years, one by the Commission itself in 1984 (see *The Wealth of Knowledge*, CPEC Report No. 84-1), it has been demonstrated that colleges and universities both create jobs and improve economic conditions in areas near where they are sited, since many employers are anxious to locate their firms where they can expect to hire educated workers.

In the absence of realistic and timely employment projections, MGT relied heavily on its focus group activity to shed further light on the educational and employment needs of the area. The results of those activities are discussed in the next section of this report.

3

Market Research

The focus groups MGT conducted focus groups at various locations with a total of 276 individuals who represented community leaders, employers, educators, students, and ordinary citizens. In general, the respondents complained about the lack of services in the region, the high cost of four-year colleges, and limited offerings in key areas such as business, health sciences (dental hygiene, nursing, X-ray tech, etc.), and computer science. Most young people preferred regular classroom settings, while employees preferred CD-ROM type instruction, or perhaps internet. There also seemed to be a general sentiment that collegiate education was not highly valued in the region. Many commented on the fact that most people who want skilled occupations leave the area for more urban settings. Most jobs in the area tend to be unskilled, hence the satisfaction among those with only a high school diploma, since they tend to stay in the area.

Based on the focus-group discussion, and in no particular order of importance, MGT offered the following summary of the comments from the focus group participants:

- ♦ Two-year institutions are affordable and offer courses that meet general community interests.
- ♦ Four-year institutions have good reputations.
- ♦ Course offerings and program/class space are limited at both two-year and four-year institutions.
- ♦ Courses with limited or no offerings include natural and agricultural sciences, medicine, technology, computer science, business administration, early childhood development, counseling, and social services.
- ♦ Programs with limited space availability are nursing and dental hygiene.
- ♦ Satellite campuses lack a sense of community.
- ♦ Core area institutions are insular and should improve community and business outreach.
- ♦ Institutional locations are inaccessible to many students.
- ♦ Few periphery area community leader respondents consider educational opportunities and program availability to be “adequate,” “available,” or “good.”
- ♦ Less than half of all core area community leader respondents consider degree programs to be “available,” while approximately half believe certificate program availability to be “good.”

- ♦ Poor accessibility to institutions, high costs, and limited community support for higher education are barriers to enrollment.
- ♦ A traditional classroom setting is the most preferred method of course delivery.
- ♦ Slow Internet connections may be a barrier to Web-based distance learning.
- ♦ Health professions degree and certificate programs are most commonly indicated as high demand and high need. Other desired and needed programs include business administration, computer science, agriculture, education, economics, social services, building trades, and heavy equipment operation.
- ♦ Medical support services, social services, law enforcement, fire science, construction, and education appear to be the three strongest regional employment markets that require a skilled and educated workforce.
- ♦ Students indicated that local opportunities for employment are not strictly guiding their career choices. However, community leaders indicated that employment opportunities offer students little incentive to pursue their education past the high school or two-year levels.
- ♦ Less than half of the core area employers interviewed reported that they provide some level of tuition reimbursement for postsecondary education courses.
- ♦ Most employers offering tuition reimbursements require that the subsidized coursework be relevant to the organization's needs and mission.
- ♦ Most community leaders are supportive of the development and introduction of new academic centers, particularly a public four-year campus or affiliated satellite office located in an accessible area.
- ♦ Some community leaders are doubtful that there would be adequate student demand to support a new institution or center. However, community leaders in the core area are more likely to indicate that there is a viable market to support a public, four-year institution.

These summary comments seem typical of the kind of responses to be expected from rural areas. Available services are substandard compared to urban settings, with the related frustrations that derive from general educational deficiencies.

**The employer
survey**

MGT mailed out 1,296 survey questionnaires in the Fall of 2001, and received 220 returns, a 17% response. Of those, half came from Shasta County, although the response rate there was only 15.5%.

Such a seemingly low response rate may suggest that the survey has little value, but surveys of this type seldom elicit stronger responses, mostly because employers tend to be very busy people who see little utility in responding to surveys. Nevertheless, the responses MGT received are inter-

esting, and while they cannot be considered totally representative of the sentiments of all employers in the area, they do point in useful directions. Based on the responses, MGT offered the following conclusions:

- ♦ The overwhelming majority of responding employers predict either stability or growth in their organization's future over the next five years. Only a small proportion expects their organizations to decline.
- ♦ Factors considered most heavily by employers concerning education/training programs include convenience (location and time), cost, and quality.
- ♦ About one-fourth of respondents indicated that they are involved in educational partnerships; the potential exists for this number to double according to response patterns.
- ♦ The most frequently mentioned barriers to education participation include issues of convenience (times, location of courses, and length of programming).
- ♦ In-person instruction at either the work site or an education institution is the preferred mode of instruction by an overwhelming margin.
- ♦ Among responding employers that use company trainers, over one fourth are interested in transferring this function to a college or university.
- ♦ Responding employers reported that most individuals involved in continuing education do so for professional rather than personal reasons.
- ♦ The majority of responding employers provide incentives, such as release time from work or tuition reimbursement, for employees to participate in training/education.
- ♦ A majority of respondents mentioned the need for additional higher education institutions; the most frequently mentioned need was for four-year institutions and related programs.
- ♦ Preferred class meeting times are once per week on a Tuesday, Wednesday, or Thursday.
- ♦ Respondents from all areas generally indicated strong interest in computer usage/software application or information technology/computer science programs at the continuing education or certification level rather than degree programs.
- ♦ Generally, in the case of all listed program areas, higher levels of interest in continuing education or pre-college or certification level programs rather than undergraduate or graduate level degrees are apparent.
- ♦ Higher levels of interest in certification programs in the skilled trades are apparent in the periphery areas.
- ♦ Computer-related fields, accounting, and business management were among the most frequently mentioned program areas for which interest in degrees was indicated.

These responses are not significantly different from those obtained by the focus groups. There are strong indications of support for expanded educational services, but issues of convenience and cost are paramount with employers, as are programs that might have some immediate impact on the work place, such as computer skills. There is a greater interest in the kind of immediate paybacks that might derive from continuing education and certificate programs, rather than full four-year degree programming.

**Program demand
estimates**

In spite of its thorough research and exploration of the subject, MGT appeared to have difficulty quantifying the demand for expanded educational services. Specifically, MGT offers the following caveat to its own estimates:

Due to the estimations utilized to calculate higher education demand estimates in the model, demand levels are stated in terms of upper and lower bounds, as absolute precision within these estimates is not possible. Hence, estimates provided in the following section should be interpreted as *approximations*. It is also very difficult to predict actual enrollments from reported interest levels, therefore demand estimates should not be interpreted as actual “show rates.” Actual show rates are subject to many unknown factors such as economic conditions, program access, depth and breadth of programming, and program marketing, to name a few. Qualitative data indicated the general absence of high concentrations of demand for degree programs and underscored access challenges within the region that are inherent in the prevailing economic conditions and rural mountainous setting. As a result of this qualitative input along with analysis of other data, these estimates are presented as a conservative range (small magnitude) of potential demand subject to variation based on factors unknown at this time (MGT, p. 5-6).

Perhaps inevitably, MGT notes that participation rates are a core issue, and that those in the six-county region are far below State averages overall. In 1999, statewide participation of high school graduates was 54.4%, while that in the six counties was only 39.0%. Subsequent data from the Commission for 2000 indicates a statewide rate of 49.1% and a six-county rate of 38.1%. MGT then states that if the local rate could be raised to the statewide rate, an additional 591 enrollments could be generated, a number that is reduced to 433 based on the 2000 updated figures, and the fact that the number of high school graduates in the six-county region declined slightly between 1999 and 2000. Even that number, of course, would depend heavily on the introduction of services by the University of California and/or the California State University, since the difference in participation between the local and statewide areas is due almost entirely to the fact that Superior California high school graduates attend the four-year systems in far fewer numbers than the statewide average.

MGT also offered a display that purports to show demand levels for a long list of educational programs. Unfortunately, the ranges in potential enrollments in these programs are so wide that they are nearly meaningless, a fact that MGT acknowledges but feels it cannot correct due to the generality of the data inputs. In short, it is not possible to develop a meaningful assessment of potential enrollment demand in the area.

Conclusions and implications

MGT concluded that there is “extensive unmet demand for higher education programming throughout the region both at the degree (particularly four-year degree programs) and CE (continuing education) levels.” To meet that demand, the consultant offered 22 recommendations, among which were the following:

- ♦ Establish economic development plans and initiatives that appropriately prioritize higher education and workforce training within the context of the overall plan or initiative.
- ♦ Develop course scheduling and sequencing to meet specific needs of working adults. Emphasize convenience of course offerings to the extent possible.
- ♦ Pursue added financial assistance for traditional age students to continue in local four-year programs (2+2 model).
- ♦ Establish seamless articulation to the extent possible between two and four-year programs.
- ♦ Where campuses or other facilities currently exist, include other (complimentary) providers to meet both continuing education and degree needs. For example, at the Shasta College or College of the Siskiyous main campuses or other facilities, consider co-locating other institutions for specific non-competing program offerings.
- ♦ Additionally, consider initiating or expanding baccalaureate or graduate course/program offerings. Some of the in-demand baccalaureate programs would most likely provide a transition from two-year to four-year degree programs (2+2 format).
- ♦ Near population centers where demand is expected to be higher, where job opportunities are more prevalent, and where there are indications of sustainable need, establish education centers to relieve or reduce access issues. These could be institution specific or joint ventures/partnerships with multiple providers at the same location sharing space, infrastructure, costs etc. New facilities could be built, but the conversion/re-use of existing facilities (e.g., buildings, store fronts, office space, etc.) that provide easy access may be more cost-efficient.
- ♦ In rural and remote locations, demand alone will not be as high and as potentially sustainable as locations closer to population points. In these areas, utilize non-permanent solutions to meet fluctuating need, including the shared use of existing sites such as schools, community centers, churches, etc. This limits options and opportunities, but it keeps infra-

structure costs down and lessens upfront costs and resource commitments by providers. Attempt to identify and recruit quality adjunct faculty.

- ♦ Introduce a select number of bachelor's degree programs to the Shasta County and Siskiyou County population corridor. Existing community colleges could provide the general education and introductory-level courses included in the bachelor's degree programs.
- ♦ Establish a limited number of academic centers in and along population corridors of the region as population and need suggest. This should be implemented over time and with appropriate local support.
- ♦ Identify outlying or remote locations where distance education mechanisms are available and reliable to complement other delivery options or as stand-alone modes of instruction.
- ♦ In response to general demand for bachelor's degrees in remote areas, seek to create access to a general social sciences or liberal studies degree, perhaps through a hybrid instructional method that could involve distance, CD-Rom and other self-study methods, experiential credits, and extension course offerings. This initial effort can lead to expanded program offerings as more job-specific program demands emerge.

Many of these ideas are doubtless meritorious, and many have been offered on previous occasions to apply not only to Superior California, but to many other areas of the State. Certainly, the identification of areas that need additional services is an ongoing process.

4

Expanding Educational Services: A List of Options

Issues and challenges identified by the Commission's advisory committee

Between February and June 2002, the Commission, with assistance from the McConnell Foundation, convened a series of meetings with postsecondary education representatives to discuss the issues and challenges that their institutions face in providing increased postsecondary education opportunities to residents of Superior California.

This section summarizes the issues and challenges identified by the representatives at those meetings. The issues are not presented in any particular order or priority.

- ♦ The State's Cal Grant Program is designed predominately to assist "traditional" students – recent high school graduates. Many of the residents of the region requiring postsecondary education opportunities are older "non-traditional" students, for whom the current Cal Grant Program provides little assistance.
- ♦ Providing opportunities for students to transfer from community colleges to four-year institutions is particularly critical if the State is to provide students with opportunities to receive baccalaureate degrees. Increased attention should be paid to transfer efforts and all institutions need to be involved in supporting, monitoring, and tracking student transfers. Offering more four-year degree programs on community college campus facilities may increase and assist in both transfer and baccalaureate attainment.
- ♦ The vast geographical spread of the region coupled with the relatively small number of students within the region create unique challenges to providing a broad range of education programs and services.
- ♦ Distance education may assist some students, but it will not be the "magic bullet" or solution for all students. Further, many students may be unable to access distance education via computers because of insufficient technological infrastructure, including both computing facilities and access to high-speed broadband connections.
- ♦ Because of various personal, political, or institutional agendas – "turf" issues – California's public colleges and universities – and their faculties – often fail to work in full and complete cooperation with one another regarding the transfer of course credits.
- ♦ Due to smaller class sizes in sparsely populated instructional locations, the cost of instruction is often higher than in other areas or regions of the State.

- ♦ While Oregon postsecondary education institutions may be geographically closer to some residents of the region, California's funding, licensure, and student financial aid policies impede their ability to provide access to neighboring California students.
- ♦ While reciprocity agreements and fee remissions have assisted some California students in receiving postsecondary education in neighboring states, existing California State law relating to reciprocity may be limiting opportunities for some students.
- ♦ The course and program review and approval requirements of the systemwide offices of California's three public systems may create obstacles to public institutions that seek to provide educational opportunities that differ from traditional practices.
- ♦ Funding and FTE (full-time-equivalent) definitions may need to be re-examined in light of the unique educational service needs and conditions of the region. Due to small class sizes, and the inability to realize economies of scale, it may be necessary to define rural FTE's as having fewer contact hours than the norm.
- ♦ The sparsely populated nature of the region creates challenges to sustain and continue specialized educational program offerings. Further, these factors make it challenging for institutions to promise and/or commit to a permanent, on-going presence in the region.
- ♦ Increased attention should be paid to identifying the educational programs that are needed by residents of the region, but are currently not now offered or made available.
- ♦ Programs that highlight and expand residents' understanding of and information about the educational opportunities available outside the region should also be considered as an option.
- ♦ California's past decision-making processes about the placement of public colleges and universities also impacts what postsecondary education opportunities are now available within the region.
- ♦ Additionally, California's Master Plan for Higher Education, which defines the role of public postsecondary education institutions in each sector, may limit the ability of a single public institution to offer the educational services desired by State residents.
- ♦ Many former K-12 students of the region who attend college outside the region never return back to the area after college graduation. The lack of available jobs with competitive salaries for college graduates within the region serves as an obstacle to retaining educated citizens. To date, this cycle has not been reversed. In order to reverse the trend, one option worthy of consideration may be some type of incentive program to encourage college-educated individuals to reside within the region.
- ♦ Many of the residents requesting or needing postsecondary opportunities are place-bound and require services/programs within their local communities.

- ♦ Several other states take advantage of the Western Undergraduate Exchange (WUE) program to provide postsecondary education opportunities to their state residents. California may wish to examine participating in that program or consider other types of compact agreements with either other states or other postsecondary education institutions.
- ♦ Program services and offerings should recognize that significant portions of potential students of the region are older, “non-traditional,” and place-bound.
- ♦ The educational needs of Native American students have not been adequately addressed.
- ♦ The need for additional teachers and graduate instruction within the region should also not be forgotten.
- ♦ The region -- as well as other areas of the State -- lacks an “independent” or “non-biased” organization or entity to coordinate the region’s postsecondary education opportunities and to disseminate information about those opportunities to residents of the region. One example cited would be the creation of a web site containing an inventory of all postsecondary education programs and courses offered within the Superior California region. Concise, comprehensive, and up-to-date information about the current postsecondary education opportunities within the region is currently not available.
- ♦ Additionally, the region lacks an “independent” or “non-biased” referee to assist or negotiate which educational provider will deliver what educational programs and services.
- ♦ At a time of fiscal crisis in California, with multi-billion dollar deficits projected to occur for years to come, it will be exceedingly difficult to obtain the resources that many of the ideas listed above might require.

**Options for
increasing
postsecondary
opportunities for
Superior California
residents**

The institutional representatives then discussed and offered the following specific issues which they believe need to be addressed in order for the State to provide increased postsecondary education opportunities to residents of Superior California:

Cal Grant Related Issues

- ♦ **LIMITED APPLICATION DEADLINES:** In order to better serve the needs of “non-traditional” students, the Cal Grant Program should increase the number of application deadline dates. Ideally, students should be able to apply and compete for a Cal Grant award on a continuous, year-round basis.
- ♦ **CAL GRANT TRANSFER ENTITLEMENT AWARD AGE LIMITATION:** The current requirement that limits eligibility for a Cal Grant Transfer Entitlement award to only those students less than 24 years of age, significantly limits and hampers the ability of older students from obtaining a baccalaureate degree. This age limitation should be reconsidered in light

of the fact that more than half of all community college students who transfer to baccalaureate-granting institutions do so beyond age 24.

- ♦ **INCREASED OUTREACH AND AWARENESS OF THE CAL GRANT PROGRAM:** Many of the institutional representatives expressed that they perceived that residents of the region were unaware of or had limited understanding about the Cal Grant Program and the assistance that it could provide. They suggested that increased outreach and marketing efforts be undertaken within the region to correct this deficiency.
- ♦ **LIMITED PORTABILITY OF CAL GRANT AWARDS:** While Oregon postsecondary education institutions are geographically closer to some residents of the region, California residents are unable to use their Cal Grant awards at accredited out-of-state institutions. As a result, State policy makers might wish to explore the possibility of providing limited portability of the Cal Grant awards to assist these State residents. One suggested option might be that a Cal Grant recipient could use their award at any accredited California institution or at any out-of-state accredited institution within 100 miles of their California place of residence.

State Licensure

The institutional representatives also discussed and identified issues relating to State licensure in various professions – including, but not limited to, teaching – as an obstacle to California residents of the region who have chosen because of geographical reasons to attend an Oregon postsecondary education institution. Increased attention and analysis should be paid by the Commission on Teacher Credentialing and by the various licensure agencies within the Department of Consumer Affairs to address, to the extent possible, these licensure-related obstacles.

Reciprocity Agreements

The institutional representatives discussed existing reciprocity agreements that permit limited numbers of California residents to attend Oregon postsecondary education institutions at in-state tuition and fee rates and for limited numbers of Oregon residents to attend California institutions at in-state resident charges. While the institutional representatives generally expressed that the existing reciprocity agreements were functioning effectively, some suggested that the State might wish to consider authorizing the creation of a consortium of postsecondary education institutions within the region – including Southern Oregon institutions – to encourage and facilitate the exchange of students between and among educational institutions within that consortium. An expansion of that concept included the suggestion that the State of California may wish to consider entering some form of formal compact or agreement with the State of Oregon to encourage and facilitate the exchange of postsecondary education students across state boundaries. Others suggested that such agreements might be limited to only specified fields of study or disciplines. In any case, these suggestions warrant further con-

sideration as means by which to increase the postsecondary education opportunities available to Californians residing in Superior California.

Mission and responsibilities of California public postsecondary education institutions

Several of the institutional representatives expressed concerns that California's current Master Plan for Higher Education limits their ability to provide the postsecondary education needed by residents of the region. They suggested that one option in rural areas of the State would be to permit community colleges to offer baccalaureate degree programs in limited disciplines to meet community needs if other public or independent colleges were unable or unwilling to do so. Some suggested that any such baccalaureate degree programs offered by community colleges might be limited only to technical fields of instruction.

Other institutional representatives added that the State needs to create flexible higher education models – particularly in rural and remote areas of the State – that respond to the identified needs of area residents. They suggested that the primary purpose or goal of a more flexible State higher education structure – albeit in limited disciplines or regions of the State – should be to encourage institutions to be more responsive to the educational needs of State residents.

Use of community college bond funding

Community college representatives indicated they are hampered in their ability to most efficiently use capital outlay bond funding because they are prohibited from commingling State and local bond resources. In reality, however, it is common practice for projects to include both State and local bond funds, so the real disagreement with current practice may be the necessity to wait until a given project involving State funds reaches a high enough level on the priority list that must be approved by both the Board of Governors and the Department of Finance. No local district can simply initiate a project (if any State funds are involved), without first gaining full State approval.

Regional postsecondary education consortium agreements

Many of the institutional representatives recognized that much of the work that needs to occur within the region must begin with them – rather than at the State-level. They recognize that they need to explore ways of increasing their collaboration with one another to better serve the needs of area residents. They also recognize that the structures, policies, and politics within which each of their institutions exists create challenges to their potential collective efforts.

As a result, the institutional representatives suggested that all regional institutions begin the process of developing an agreement concerning their future

activities and efforts within the region. Such an agreement could serve to document the “ground rules” by which new institutional efforts and initiatives within the region would be undertaken by member institutions. Commission staff strongly endorses this concept and encourages the postsecondary education institutions within the region to develop such an agreement.

Funding issues

As previously noted, the cost of instruction is often higher in rural and remote regions of the State because class sizes in those areas generally tend to be smaller. As a result, in order to encourage and make it economically more attractive for California’s public postsecondary education institutions to provide increased course and program offerings in rural and more remote regions of the State, the State should consider increasing the funding it provides to support student enrollment in these locales.

Institutional representatives noted that if the State is unable or unwilling to provide additional State resources for this purpose, one alternative that the State may wish to consider is providing postsecondary education institutions with the authority to assess higher charges to students attending courses at rural and remote locations in order to recover the additional expenses incurred in providing instruction at these sites. If this latter option were considered, several additional factors -- such as the availability and amount of student financial aid -- would also need to be reexamined. Given that the objective is to increase student access and participation in postsecondary education, consideration of any increase in student charges should be carefully analyzed to ensure that it does not result in decreased -- rather than increased -- access to postsecondary education opportunities for students of the region.

State policy on serving the educational needs of rural California

Several of the institutional representatives expressed the desire that the State articulate and adopt an explicit policy regarding the need to provide convenient access to postsecondary education opportunities for all State residents -- including those in rural portions of the State. They added that such a policy might assist the State in recognizing, planning for, and better serving the needs of rural State residents, such as those in “Superior California.”

5

Conclusions

Summary of the report

In this report, the Commission has endeavored to respond to Budget Act language that asked for proposals to increase educational opportunities for the residents of Superior California. In pursuit of that goal, a study area was defined to include six counties (Shasta, Siskiyou, Trinity, Lassen, Modoc, and Tehama) that represent almost all of the area north of Chico and east of Humboldt and Mendocino Counties. That area has been described in some detail in Part One of this report, and may fairly be characterized as generally mountainous and sparsely populated, with most of the residents residing along the Interstate 5 highway corridor, particularly in and around the cities of Redding and Red Bluff. Overall, the six counties have a current population (2000) of about 320,000, a number that is expected to grow to about 350,000 by 2010, a growth rate of just under one percent per year.

Postsecondary educational services are limited in this region, and consist of three community colleges and one independent four-year college with strong sectarian ties. There are no public four-year universities in the region, with the closest campuses being Chico State University to the south, Humboldt State University to the west, and the University of California at Davis some 100 miles to the south of Chico.

In addition, the Commission's review has considered not only the needs and issues of Superior California, but also the implications for shaping public policy throughout the State.

Constraints on service expansion

Serving such a predominantly rural area presents many challenges, since the population base is insufficient to justify a full-service four-year campus of either the University or the State University. In general, a population of about 3 million is required for the former; half that for the latter, and even then the development time may require ten to fifteen years. As an example, planning for the proposed new campus of UC Merced began in 1988, and it is not expected to open until 2005. Planning for the new CSU, Channel Islands campus actually began in the 1960s, and was under active consideration for over 20 years, with numerous sites being considered.

There is also the issue of State finance. The 2002-03 State budget has been signed by the Governor with a multi-billion deficit in current revenues, and the Legislative Analyst has stated that it is likely that the State will run a \$10 billion deficit on an annual basis for at least the next five years, with the total deficit potentially reaching \$50 billion by 2006-07. Such a fiscal situation tends to discourage new initiatives of all kinds, regardless of how meritorious they may be.

Beyond the support budget, there are serious capital outlay issues as well. An education bond issue in the amount of \$13.05 billion will appear on the November 2002 ballot, to be allocated to all of education over a four-year period. Of that amount, \$1.65 billion is earmarked for higher education, but there is no assurance that it will pass, and it is almost fully earmarked for existing campus projects even if it does.

While it is not possible for the State to provide urban service levels within rural environments, and while the demands on State finance are considerable, the Commission believes that there are a number of initiatives that can be undertaken that will enhance postsecondary education service levels in the Superior California area. Many of those initiatives have been discussed in this report, and while not discussed specifically, it is also true that many rural areas of California have been served, and are now being served, by everything from educational centers to distance learning systems.

An educational center

To a great extent, the provision of postsecondary education services is a function of both population and geography, and it is therefore prudent to focus on Shasta College as the existing postsecondary institution with both the most central geographic location and proximity to a majority of the people who live in the Superior California area. That college, in Redding, appears to be an ideal site for an educational center sponsored by a State University campus, one that might also employ a downlink for distance learning courses from other campuses. The most logical campus to sponsor such a center would appear to be California State University, Chico, since it is the nearest -- and because it has vast experience in distance learning -- but it is certainly possible that other campuses might entertain the possibility as well.

In general, State University educational centers must demonstrate that they can generate 500 FTES to achieve official center status, and it is unlikely that a center at Shasta or elsewhere in the region could generate such an enrollment immediately. Most centers, however, began with far less, and grow over a period of years as population and interest increase. It is likely that such a scenario could play out at Shasta College also, or at some other site in the Redding/Red Bluff corridor. The important thing will be to begin the process of discussion that will lead to the first course and program offerings.

As four-year campuses serve as sponsors for educational centers, so do the centers often serve as hubs for additional services in surrounding areas. Courses are commonly offered in schools, office buildings, and other locations in the evenings as part of the center's curriculum. The challenge is always to find course and program offerings that attract enrollments.

A joint baccalaureate

MGT suggested introducing a limited number of bachelor's degree programs on community college campuses, a recommendation that is currently prohibited by the Master Plan, which restricts community colleges to the first two years of instruction. It is possible, however, to introduce baccalaureate programs through an educational center, as noted above, and the Legislature

may want to consider the possibility of amending the statutes to permit what might be called a “joint baccalaureate” program, a specific BA or BS degree that would be offered jointly by a UC or CSU campus, and a community college. Joint doctoral programs have been statutorily authorized for decades; offering a joint baccalaureate -- probably with Commission approval and legislative authorization -- that would address very specific needs, could be considered.

The Commission does not believe, however, that community colleges should be given even limited authority to award bachelor’s degrees. The suggestion that they be permitted to do so has a very long history, but it is a cornerstone principle of the Master Plan that such an authorization would lead to untold and unending pressures to authorize more and more such degrees, with the possibility ultimately of the community colleges offering unwanted and expensive competition with the existing four-year systems. With resources as constrained as they are now, and with those constraints most likely to continue far into the future, the possibility of program duplication and proliferation should be strongly discouraged.

Cal grant flexibility

If it is not possible to greatly expand the physical infrastructure of higher education within the six-county area, it may well be possible to increase the opportunities available to residents of the area to attend existing institutions elsewhere. The Commission believes that the suggestions contained in this report (p. 20), both to increase the flexibility of the Cal Grant program, and to expand its applicability to Oregon and perhaps other states, deserves the most serious consideration.

A final comment

Given the demographics of Superior California -- its limited population and slow growth -- it is unlikely that a full array of postsecondary education programming, including baccalaureate and higher programs, will be created in the next several decades. Many residents of the area will identify needs, but the fiscal and logistical obstacles to meeting those needs are formidable. The Commission believes, however, that improvements can be made, and that the residents of the area, along with education officials in the community colleges, employers, and community leaders, should pursue such efforts with creativity and vigor. The Commission is more than willing to serve as the “referee” or “independent organization” that will help move that process forward.

Appendix A

**THE NORTHERN CALIFORNIA
HIGHER EDUCATION NEEDS
ASSESSMENT**

Executive Summary

SUBMITTED TO:

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DECEMBER 14, 2001

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Background

The educational and economic development needs of Shasta, Siskiyou, and surrounding northern California counties have been the subject of numerous studies over the past several years. However, in spite of these past studies, little has changed either educationally or economically.

In an effort to address the need to enhance and increase higher education opportunities in northern California, The McConnell Foundation brought together community leaders and higher education representatives in February 2000 to begin a series of discussions about higher education needs of the area. The McConnell Foundation is a private, independent foundation whose mission is to help build better communities through philanthropy. Grants are awarded to qualified nonprofit 501(c)(3) organizations, government agencies, and public schools (high school and above) in Shasta and Siskiyou Counties in the general areas of arts and culture, community vitality, education, environment, health care, recreation, and social services. Since 1989, the Foundation has awarded more than 480 grants to 176 organizations totaling \$62,951,041. An additional \$1,782,000 has been awarded in scholarships to seniors enrolled in traditional public high schools and continuation high schools in Modoc, Shasta, Siskiyou, and Trinity Counties, and Big Valley High School in Lassen County.

Following these initial discussions about enhanced higher education opportunities, which began in February 2000, The McConnell Foundation convened a committee of higher education administrators from Shasta College; College of the Siskiyous; California State University, Chico; and Southern Oregon University in March 2001. The McConnell Foundation and these higher education partners met regularly and determined a need for the following information:

- higher education learning needs of current, potential, and future students;
- current, potential, and future workforce needs for employers (including analysis of the impact of increased higher education opportunities on workforce needs); and
- community higher education needs.

In August 2001, The McConnell Foundation, with input from its higher education partners, contracted MGT of America, Inc. (MGT) to conduct an assessment of higher education needs in northern California. During fall 2001, MGT conducted an employer survey along with interviews and focus groups involving students, employers, employees, community leaders, and other area stakeholders.

Geographic Focus of the Study

The focus of MGT's assessment included the six-county area of northern California: Shasta, Siskiyou, Trinity, Lassen, Modoc, and Tehama Counties. Within this six-county region, The McConnell Foundation and its higher education partners identified a core study area, which includes most of Shasta County and the most heavily populated areas within Tehama and Siskiyou Counties. The entire six-county study area spans approximately 100 miles from north-to-south and 120 miles from east-to-west. Mountainous terrain throughout the region makes for difficult travel. Hence, most areas are sparsely populated.

Demographic Profile of the Study Area

Population

The current population of the core and periphery study areas is 320,000 persons, about half of whom reside in Shasta County. The area has a relatively low but growing proportion of minorities, as the proportion of non-Hispanic white persons declined from

89 to 83 percent of the population over the period spanning from 1990 through 2000. The ratio of minorities (17%) is still much lower than the statewide average of 53 percent. The mean age of 37.5 years in these counties is significantly greater than the statewide mean age of 33.3 years. A linear projection based on 1990 through 2000 Census data substantiates the prediction that the population in the six-county study area will grow to 350,000 by the year 2010.

Education

According to the most recent Census data available (1990), the proportion of individuals in the study area obtaining associate's degrees was slightly higher than the statewide and national averages, while bachelor's degree attainment fell well below these comparative benchmarks (six-county average, 12.3%; California, 23.4%; United States, 20.3%). This finding suggests limited access to bachelor's degree programs in the area.

Concerning the supply of traditional college enrollments, the number of high school graduates as a proportion of 12th grade enrollment has increased slightly, on average, within the six-county area from 1993 through 1999. This contrasts with the statewide rate that has declined slightly over this same period. The rates in both the six-county region and the state are expected to increase slightly through 2010. The participation of high school graduates in postsecondary education has also increased significantly, as this rate among high school graduates in the core and periphery study areas increased from 29 to 39 percent from 1990 to 1999. This phenomenon is due primarily to increased enrollments in California's community colleges by graduates from Shasta, Tehama, and Trinity Counties. Through 2000, community college enrollment levels in each of these three counties have increased by more than 150 percent of 1990 enrollments. Additionally, transfer rates from California Community Colleges in the study

area to California State University and University of California institutions have increased from 28.67 per one thousand enrollments in 1997 to 34.64 enrollments per thousand in 1999. This still fell slightly below the statewide transfer rate of 36.89 students per thousand enrollments in 1999. Although higher education enrollment levels declined throughout the region and state from 1990 through 1995, this trend subsequently reversed and strong growth has been observed across all sectors over the past five years. However, total postsecondary participation rates in the six-county area still lag far behind statewide rates (39.0% versus 54.4%).

Employment

Though recent declines in all aspects of the national economy certainly will have some bearing on short-run growth, it is likely that the long-term economic patterns will eventually stabilize. Thus, linear projections of employment growth, estimated to fall between 6 and 8 percent from 2001 to 2007 in the core and periphery study areas, are likely to be fairly accurate.

Nonlinear projections of nonfarm employment, produced by the California Employment Development Department for 1997 to 2004, forecast much higher growth rates. Total growth in Shasta County for nonfarm employment was predicted to approach 16 percent, while the periphery counties were expected to experience growth of about 8 percent. Across occupational categories, the highest levels of growth were predicted to occur in the *Professional, Paraprofessional, and Technical* classification (19.5% in Shasta County, 10.1% in the NORTEC¹ counties); the *Sales and Related* classification (23.4%, 12.9%); and the *Service* classification (14.3%, 7.3%). Among specific occupational classifications, high growth was expected in certain executive, education-related, and health-related occupations.

¹ NORTEC - Northern Rural Training and Education Consortium. Includes Del Norte, Lassen, Modoc, Plumas, Siskiyou, Tehama, and Trinity Counties.

Across industrial sectors, the growth in the *Service Producing* sectors is expected to be the strongest through 2007. Linear projections of the past decade's trends show this sector expanding in excess of 10 percent in both Shasta and the periphery counties during this time period. Employment in the *Agricultural and Goods Producing* sector is expected to exhibit the weakest trends, declining by 18.3 percent in Shasta County, while increasing by just 5.4 percent in the periphery counties. Based on recent trends, the *Government* sector is predicted to expand by 9.1 percent in Shasta County and 5.1 percent in the periphery counties. These linear trends and projections of employment growth were utilized in conjunction with survey response data to generate estimates of demand for various types of educational programs.

Summary of Findings from Interviews and Focus Groups with Area Stakeholders

MGT interviewed community leaders and employers in the six-county area as well as conducted focus groups in core and periphery areas with community college personnel, high school guidance counselors, employees of local employers, and three student populations that included: high school juniors and seniors, community college students (traditional and nontraditional students), and local students at regional universities (traditional and transfer students). The interviews and focus groups were designed to determine what types of educational opportunities and support are needed and to answer questions relating to current barriers, institutional strengths and weaknesses, preferred methods of course delivery, employer support for continuing education (CE), and the relationship between employment opportunities and student career choices. The following is a summary of the findings from the interviews and focus groups:

- Two-year institutions are affordable and offer courses that meet general community interests.
- Four-year institutions in the area generally have good reputations.
- Course offerings and program/class space are limited at both two-year and four-year institutions.
- Courses with limited or no offerings include natural and agricultural sciences, medicine, technology, computer science, business administration, early childhood development, counseling, and social services.
- Programs with limited space availability include nursing and dental hygiene.
- Satellite campuses fail to provide a sense of community.
- Core area institutions are insular and should improve community and business outreach.
- Institutional locations are inaccessible to many potential students.
- Few periphery area community-leader respondents consider educational opportunities and program availability to be “adequate,” “available,” or “good.”
- Less than half of all core area community leader respondents consider degree programs to be “available,” while approximately half describe certificate program availability as “good.”
- Poor accessibility to institutions, high costs, and limited community support for higher education are barriers to enrollment.
- A traditional classroom setting is the most preferred method of course delivery.
- Slow Internet connections may impede use of Web-based distance learning.
- Health profession degrees and certificate programs are most commonly indicated as high demand and high need. Other desired and needed programs are business administration, computer science, agriculture, education, economics, social services, building trades, and heavy equipment operation.
- Medical support services, social services, law enforcement, fire science, construction, and education appear to be the strongest regional employment markets that require a skilled and educated workforce.
- Students indicated that local opportunities for employment are not strictly guiding their career choices. However, community leaders indicated that employment opportunities offer students little incentive to pursue their education past the high school or two-year levels.
- Less than half of the core area employers interviewed reported that they provide some level of tuition reimbursement for postsecondary education courses.

- Most employers offering tuition reimbursements require that the subsidized course work be relevant to the organization's needs and mission.
- Most community leaders are supportive of the development and introduction of new academic centers, particularly a public four-year campus or affiliated satellite office located in an accessible area.
- Some community leaders are doubtful that there would be adequate student demand to support a new institution or center. However, community leaders in the core area are more likely to indicate that there is a viable market to support a public, four-year institution.

General Conclusions Derived from the Employer Survey

MGT also conducted a mail survey of employers within the six-county area. The survey was mailed to over 1200 employers in early October 2001 with a reminder postcard sent two weeks later. MGT also conducted follow-up reminder telephone calls with over 100 large employers in early November 2001. The final response rate to the survey was 17%, within the expected range for an employer survey of this nature. The responding employers were well-balanced by county and employer size, and the dispersion of industrial classifications among respondents largely follows that of the general population of employers in the six-county area. General conclusions derived from the employer survey follow:

- The overwhelming majority of responding employers predict either stability or growth in their organization's future over the next five years. Only a small proportion expects their organizations to decline.
- Factors considered most heavily by employers concerning education/training programs include convenience (location and time), cost, and quality.
- About one-fourth of respondents indicated that they are involved in educational partnerships, and potential exists for this number to double according to response patterns.
- The most frequently mentioned barriers to educational participation include issues of convenience (times, location of courses, and length of programming).
- In-person instruction at either the work site or an education institution is the preferred mode of instruction by an overwhelming margin.

- Among responding employers that use company trainers, over one-fourth are interested in transferring this function to a college or university.
- Responding employers reported that most individuals involved in CE do so for professional rather than personal reasons.
- The majority of responding employers provide incentives, such as release time from work or tuition reimbursement, for employees to participate in training/education.
- A majority of respondents mentioned the need for additional higher education institutions; the most frequently mentioned needs, by far, pertained to four-year institutions and related programs.
- Preferred class meeting times are once per week on a Tuesday, Wednesday, or Thursday.
- Respondents from all areas generally indicated strong interest in computer usage/software application or information technology/computer science programs at the CE or certification level rather than degree programs.
- Generally, in the case of all listed program areas, higher levels of interest in CE or precollege or certification level programs rather than undergraduate or graduate level degrees are apparent.
- Higher levels of interest in certification programs in the skilled trades are apparent in the periphery areas.
- Computer-related fields, accounting, and business management were among the most frequently mentioned program areas for which interest in degrees was indicated.

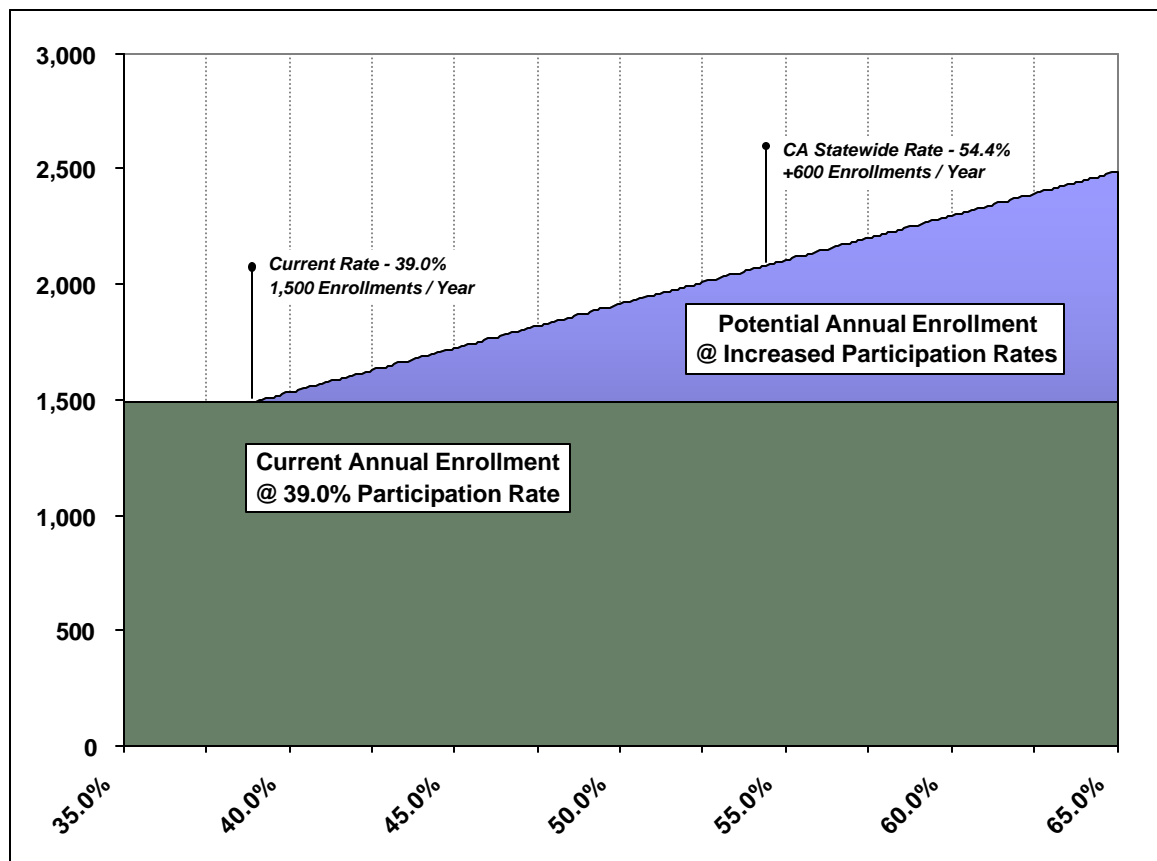
Program Demand Estimates

MGT's analyses of demand for educational services in this region revealed that the demand levels and enrollment potential in the core and periphery service areas are quite significant. Both in terms of traditional and nontraditional student demand, considerable room for growth exists if the appropriate educational needs are addressed and access barriers are eliminated.

Traditional Students

Potential for expanded enrollments of traditional students in higher education is apparent according to demographic data (Exhibit 1). Increasing participation rates by reducing the access barriers to postsecondary education faced by high school graduates in the area could yield hundreds of additional enrollments at local institutions per year. If local participation rates could be raised to statewide levels, up to 600 additional high school graduates would enroll in California institutions. The proportion of this potential enrollment pool remaining in the area would depend on the degree to which local access barriers such as proximity and cost could be addressed.

EXHIBIT 1
ANNUAL ENROLLMENT POTENTIAL AMONG HIGH SCHOOL GRADUATES, SIX-COUNTY MARKET AREA, 1999



Source: California Postsecondary Education Data Commission and California Department of Finance.

Over time, these access barriers have created a significant deficit of bachelor's degree level educated individuals in the area. The total shortfall, compared with statewide levels, amounts to a dearth of approximately 24,000 individuals suggesting considerable potential for increasing enrollments in bachelor's degree programs in a substantially underserved area. However, this enrollment potential depends heavily on the availability of convenient and affordable programming for local citizens.

Nontraditional Students

Based on scale of employment and employer interest levels, several program areas appear to reflect the highest levels of nontraditional student demand across the core and periphery service areas, industries, program categories, and program levels analyzed within this study.

- As might be expected in a measure of employer interest, precollege and certification level programming and CE programming exhibited higher levels of demand than undergraduate and graduate level training.
- Technology related training (both in terms of computer usage/software applications programs and information technology/computer science programs) demonstrates the highest levels of demand across both regions and most of the program levels and industrial sectors included within the analysis.
- Other fields demonstrating high levels of demand include accounting/bookkeeping, basic skills, general education, health-related, and presentation skills training. Interest levels are characteristic of an economy shifting away from an agricultural and goods producing base toward industries based in services and information.

Pertaining to nontraditional student demand for specific programs (Exhibits 2 and 3), concentrations of demand are apparent within several fields across a number of levels. In Shasta County (primarily residing in the core study area), program areas of highest demand include:

- computer and software applications across all levels;
- accounting and bookkeeping at the precollege or certification, undergraduate, and CE levels;

EXHIBIT 2

DEMAND PROJECTIONS BY REGION, INDUSTRY, PROGRAM CATEGORY, AND PROGRAM LEVEL, SHASTA COUNTY, 2007

PROGRAM OF INTEREST BY INDUSTRY	SHASTA COUNTY			
	ESTIMATED DEMAND BY LEVEL			
	PRE-COLLEGE OR CERTIFICATION LEVEL	UNDERGRADUATE LEVEL	GRADUATE LEVEL	CONTINUING EDUCATION
	Lower - Upper	Lower - Upper	Lower - Upper	Lower - Upper
AGRICULTURAL AND GOODS PRODUCING				
Computer usage / software applications	28 - 140	0 - 0	0 - 0	9 - 45
Accounting / bookkeeping	14 - 70	5 - 25	0 - 0	9 - 45
Basic skills	23 - 115	5 - 25	0 - 0	9 - 45
Information technology / computer science	0 - 0	0 - 0	0 - 0	5 - 25
Presentation skills	0 - 0	5 - 25	0 - 0	5 - 25
English as a second language	9 - 45	0 - 0	0 - 0	0 - 0
Business management / marketing	0 - 0	5 - 25	0 - 0	5 - 25
General education courses	5 - 25	0 - 0	0 - 0	0 - 0
Health-related fields	0 - 0	0 - 0	0 - 0	5 - 25
Engineering	5 - 25	5 - 25	0 - 0	9 - 45
Education (incl. ed. administration)	0 - 0	0 - 0	0 - 0	0 - 0
Technical specialty area	5 - 25	0 - 0	0 - 0	0 - 0
Skilled trades	38 - 190	0 - 0	0 - 0	5 - 25
Total Demand By Level	127 - 635	25 - 125	0 - 0	61 - 305
SERVICE PRODUCING (NON-GOVERNMENT)				
Computer usage / software applications	178 - 890	95 - 475	25 - 125	146 - 730
Accounting / bookkeeping	76 - 380	89 - 445	25 - 125	57 - 285
Basic skills	102 - 510	57 - 285	6 - 30	19 - 95
Information technology / computer science	83 - 415	95 - 475	32 - 160	70 - 350
Presentation skills	57 - 285	64 - 320	19 - 95	64 - 320
English as a second language	25 - 125	25 - 125	6 - 30	13 - 65
Business management / marketing	25 - 125	76 - 380	32 - 160	64 - 320
General education courses	38 - 190	64 - 320	32 - 160	25 - 125
Health-related fields	57 - 285	70 - 350	51 - 255	64 - 320
Engineering	19 - 95	6 - 30	19 - 95	6 - 30
Education (incl. ed. administration)	6 - 30	57 - 285	57 - 285	64 - 320
Technical specialty area	51 - 255	19 - 95	19 - 95	32 - 160
Skilled trades	51 - 255	6 - 30	13 - 65	38 - 190
Total Demand By Level	768 - 3,840	723 - 3,615	336 - 1,680	662 - 3,310
GOVERNMENT				
Computer usage / software applications	73 - 365	29 - 145	59 - 295	59 - 295
Accounting / bookkeeping	15 - 75	0 - 0	15 - 75	0 - 0
Basic skills	0 - 0	15 - 75	15 - 75	0 - 0
Information technology / computer science	44 - 220	15 - 75	29 - 145	44 - 220
Presentation skills	15 - 75	0 - 0	29 - 145	29 - 145
English as a second language	0 - 0	0 - 0	0 - 0	0 - 0
Business management / marketing	0 - 0	0 - 0	0 - 0	15 - 75
General education courses	0 - 0	29 - 145	29 - 145	0 - 0
Health-related fields	0 - 0	0 - 0	15 - 75	0 - 0
Engineering	15 - 75	15 - 75	29 - 145	29 - 145
Education (incl. ed. administration)	15 - 75	15 - 75	29 - 145	15 - 75
Technical specialty area	44 - 220	0 - 0	0 - 0	15 - 75
Skilled trades	15 - 75	0 - 0	0 - 0	0 - 0
Total Demand By Level	236 - 1,180	118 - 590	249 - 1,245	206 - 1,030
ALL INDUSTRIES				
Computer usage / software applications	279 - 1,395	124 - 620	84 - 420	214 - 1,070
Accounting / bookkeeping	105 - 525	94 - 470	40 - 200	66 - 330
Basic skills	125 - 625	77 - 385	21 - 105	28 - 140
Information technology / computer science	127 - 635	110 - 550	61 - 305	119 - 595
Presentation skills	72 - 360	69 - 345	48 - 240	98 - 490
English as a second language	34 - 170	25 - 125	6 - 30	13 - 65
Business management / marketing	25 - 125	81 - 405	32 - 160	84 - 420
General education courses	43 - 215	93 - 465	61 - 305	25 - 125
Health-related fields	57 - 285	70 - 350	66 - 330	69 - 345
Engineering	39 - 195	26 - 130	48 - 240	44 - 220
Education (incl. ed. administration)	21 - 105	72 - 360	86 - 430	79 - 395
Technical specialty area	100 - 500	19 - 95	19 - 95	47 - 235
Skilled trades	104 - 520	6 - 30	13 - 65	43 - 215
Total Demand By Level	1,131 - 5,655	866 - 4,330	585 - 2,925	929 - 4,645

Source: California Employment Development Department, Labor Market Information (<http://www.calmis.ca.gov/>); Fall 2001 survey of local employers, conducted by MGT of America, Inc.

Note: Demand estimates are based on total employment by region and industry in conjunction with responses to Fall 2001 survey of local employers. As the survey was structured such that respondents could indicate multiple training needs for individual employees, total demand estimates could represent duplicated headcounts of potential enrollments in programs. Estimates are based on presumption that employers indicating demands for specific forms of training would require training for 1% (lower estimate) to 5% (upper estimate) of their employees in this area.

EXHIBIT 3

DEMAND PROJECTIONS BY REGION, INDUSTRY, PROGRAM CATEGORY, AND PROGRAM LEVEL, PERIPHERY COUNTIES, 2007

PROGRAM OF INTEREST BY INDUSTRY	PERIPHERY COUNTIES			
	ESTIMATED DEMAND BY LEVEL			
	PRE-COLLEGE OR CERTIFICATION LEVEL	UNDERGRADUATE LEVEL	GRADUATE LEVEL	CONTINUING EDUCATION
	Lower - Upper	Lower - Upper	Lower - Upper	Lower - Upper
AGRICULTURAL AND GOODS PRODUCING				
Computer usage / software applications	52 - 260	10 - 50	0 - 0	26 - 130
Accounting / bookkeeping	31 - 155	10 - 50	10 - 50	16 - 80
Basic skills	31 - 155	5 - 25	10 - 50	16 - 80
Information technology / computer science	5 - 25	21 - 105	5 - 25	5 - 25
Presentation skills	21 - 105	21 - 105	10 - 50	10 - 50
English as a second language	10 - 50	0 - 0	5 - 25	10 - 50
Business management / marketing	21 - 105	5 - 25	10 - 50	10 - 50
General education courses	10 - 50	16 - 80	10 - 50	5 - 25
Health-related fields	10 - 50	0 - 0	5 - 25	10 - 50
Engineering	5 - 25	10 - 50	21 - 105	16 - 80
Education (incl. ed. administration)	0 - 0	10 - 50	10 - 50	5 - 25
Technical specialty area	26 - 130	10 - 50	16 - 80	16 - 80
Skilled trades	31 - 155	10 - 50	5 - 25	31 - 155
Total Demand By Level	253 - 1,265	128 - 640	117 - 585	176 - 880
SERVICE PRODUCING (NON-GOVERNMENT)				
Computer usage / software applications	73 - 365	23 - 115	9 - 45	105 - 525
Accounting / bookkeeping	36 - 180	36 - 180	0 - 0	32 - 160
Basic skills	50 - 250	23 - 115	5 - 25	14 - 70
Information technology / computer science	27 - 135	18 - 90	14 - 70	91 - 455
Presentation skills	32 - 160	23 - 115	5 - 25	55 - 275
English as a second language	23 - 115	14 - 70	9 - 45	27 - 135
Business management / marketing	27 - 135	27 - 135	5 - 25	18 - 90
General education courses	41 - 205	41 - 205	18 - 90	36 - 180
Health-related fields	45 - 225	23 - 115	9 - 45	45 - 225
Engineering	9 - 45	9 - 45	5 - 25	9 - 45
Education (incl. ed. administration)	27 - 135	14 - 70	27 - 135	41 - 205
Technical specialty area	14 - 70	9 - 45	9 - 45	23 - 115
Skilled trades	55 - 275	18 - 90	5 - 25	18 - 90
Total Demand By Level	459 - 2,295	278 - 1,390	120 - 600	514 - 2,570
GOVERNMENT				
Computer usage / software applications	72 - 360	0 - 0	8 - 40	80 - 400
Accounting / bookkeeping	40 - 200	0 - 0	16 - 80	56 - 280
Basic skills	8 - 40	8 - 40	8 - 40	8 - 40
Information technology / computer science	48 - 240	16 - 80	8 - 40	48 - 240
Presentation skills	40 - 200	8 - 40	16 - 80	32 - 160
English as a second language	0 - 0	0 - 0	16 - 80	16 - 80
Business management / marketing	16 - 80	0 - 0	16 - 80	8 - 40
General education courses	24 - 120	8 - 40	16 - 80	16 - 80
Health-related fields	8 - 40	0 - 0	16 - 80	16 - 80
Engineering	16 - 80	24 - 120	32 - 160	24 - 120
Education (incl. ed. administration)	16 - 80	0 - 0	16 - 80	40 - 200
Technical specialty area	32 - 160	16 - 80	16 - 80	32 - 160
Skilled trades	16 - 80	8 - 40	0 - 0	24 - 120
Total Demand By Level	336 - 1,680	88 - 440	184 - 920	400 - 2,000
ALL INDUSTRIES				
Computer usage / software applications	197 - 985	33 - 165	17 - 85	211 - 1,055
Accounting / bookkeeping	107 - 535	46 - 230	26 - 130	104 - 520
Basic skills	89 - 445	36 - 180	23 - 115	38 - 190
Information technology / computer science	80 - 400	55 - 275	27 - 135	144 - 720
Presentation skills	93 - 465	52 - 260	31 - 155	97 - 485
English as a second language	33 - 165	14 - 70	30 - 150	53 - 265
Business management / marketing	64 - 320	32 - 160	31 - 155	36 - 180
General education courses	75 - 375	65 - 325	44 - 220	57 - 285
Health-related fields	63 - 315	23 - 115	30 - 150	71 - 355
Engineering	30 - 150	43 - 215	58 - 290	49 - 245
Education (incl. ed. administration)	43 - 215	24 - 120	53 - 265	86 - 430
Technical specialty area	72 - 360	35 - 175	41 - 205	71 - 355
Skilled trades	102 - 510	36 - 180	10 - 50	73 - 365
Total Demand By Level	1,048 - 5,240	494 - 2,470	421 - 2,105	1,090 - 5,450

Source: California Employment Development Department, Labor Market Information (<http://www.calmis.ca.gov/>); Fall 2001 survey of local employers, conducted by MGT of America, Inc.

Note: Demand estimates are based on total employment by region and industry in conjunction with responses to Fall 2001 survey of local employers. As the survey was structured such that respondents could indicate multiple training needs for individual employees, total demand estimates could represent duplicated headcounts of potential enrollments in programs. Estimates are based on presumption that employers indicating demands for specific forms of training would require training for 1% (lower estimate) to 5% (upper estimate) of their employees in this area.

- precollege or certification and undergraduate level training in basic skills;
- information technology and computer science training at all levels;
- presentation skills programs at the precollege or certification, undergraduate, and CE levels;
- business management and marketing training at the undergraduate and CE levels;
- general education courses at the undergraduate and graduate levels;
- training in health-related fields at the undergraduate, graduate, and CE levels;
- education-related and educational administration courses at the undergraduate, graduate, and CE levels; and,
- certain technical specialty programs at the precollege or certification level.

In the periphery counties, similar patterns of demand are apparent. The programs and levels exhibiting the highest levels of demand include:

- computer usage and software applications at the precollege or certification level and CE level;
- accounting and bookkeeping at the precollege or certification and CE levels;
- basic skills training at the precollege or certification level;
- information technology and computer science at the precollege or certification and CE levels;
- presentation skills at the precollege or certification level and CE level;
- business management and marketing programs at the precollege or certification level;
- general education courses at the precollege or certification level and at the undergraduate level;
- precollege or certification and CE courses in health-related fields;
- engineering programs at the graduate level;

- CE programs in education-related and educational administration fields;
- training in technical specialty areas at the precollege or certification level and CE level; and
- precollege or certification level and CE level training in certain skilled trades.

Demand levels for a wide variety of educational programs in this region are substantial. There is considerable potential for enrollment increases if access barriers can be overcome and training specific to the industrial market's needs is provided by local postsecondary institutions.

Recommended Strategies to Address Program Demands and Access Barriers

Synthesis of all data collected in the study led to the following recommended strategies to address access issues and expand higher education offerings throughout the study area.

1. Establish economic development plans and initiatives that appropriately prioritize higher education and workforce training within the context of the overall plan or initiative. This will help community leaders work closely with education and training providers. It will provide a blueprint to help understand which providers can best meet the area needs, how they can collaborate with other partners, and what level of commitment the providers might expect from the communities, the local government, the business leaders, and the citizenry.
2. Forge close collaboration between economic development entities and higher education providers in support of the specific objective to increase the proportion of jobs in the region that pay degree-level wages.
3. Develop course scheduling and sequencing to meet specific needs of working adults. Emphasize convenience of course offerings to the extent possible.
4. Pursue added financial assistance for traditional aged students to continue in local four-year programs (2+2 model).

5. Develop coordinated efforts with economic development entities such that job opportunities parallel training and education offerings to the extent possible.
6. Establish seamless articulation to the extent possible between two- and four-year programs.
7. Where campuses or other facilities exist, include other (complimentary) providers to meet both CE and degree needs. For example, at the Shasta College or College of the Siskiyous main campuses other facilities, consider co-locating other institutions for specific noncompeting program offerings. Additionally, consider initiating or expanding baccalaureate or graduate course/program offerings. Some of the in-demand baccalaureate programs would most likely provide a transition from two-year to four-year degree programs (2+2 format).
8. Near population centers where demand is expected to be higher, where job opportunities are more prevalent, and where there are indications of sustainable need, establish education centers to relieve or reduce access issues. These could be institution specific or joint ventures/partnerships with multiple providers at the same location sharing space, infrastructure, costs, etc. New facilities could be built, but the conversion/re-use of existing facilities (e.g., buildings, store fronts, office space, etc.) that provide easy access may be more cost –efficient.
9. In rural and remote locations, demand alone will not be as high and as potentially sustainable as locations closer to population points. In these areas, utilize nonpermanent solutions to meet fluctuating need, including the shared use of existing sites such as schools, community centers, churches, etc. This limits options and opportunities, but keeps infrastructure costs down and lessens up-front costs and resource commitments by providers. Attempt to identify and recruit quality adjunct faculty.
10. Introduce a select number of bachelor's degree programs to the Shasta County and Siskiyou County population corridor. Existing community colleges could provide the general education and introductory-level courses included in the bachelor's degree programs.
11. Initially offer new bachelor's degree programs that meet local needs and are compatible with existing community college programming or areas of concentration. Introduce expanded programming when demand is strong and costs can be reduced.
12. Expand opportunities for a 2+2 model of programming with Shasta College and College of the Siskiyous, providing core courses at their main campuses and key academic centers. Identify appropriate four-

- year institutions to locally offer degree-specific programming to complete the baccalaureate option.
13. Establish a limited number of academic centers in and along population corridors of the region as population and need suggest. This should be implemented over time and with appropriate local support.
 14. Identify outlying or remote locations where distance education mechanisms are available and reliable to complement other delivery options or as stand-alone modes of instruction.
 15. Match the program inventory among local and participating higher education institutions to area apparent needs. Identify existing or potential program providers.
 16. Determine the appropriate model(s) for the delivery of off-campus programs. This review should identify potential costs, required resources, advantages, and risks involved in the initial implementation and continued offering of higher education programming at each selected site.
 17. Identify opportunities to import courses and degree programs from other four-year institutions other than the partnered institutions.
 18. Collaborate with local employers to establish partnerships for training additional degreed workers.
 19. Expand dual enrollment opportunities for college credit courses in area high schools (primarily local community college transfer programming).
 20. In response to general demand for bachelor's degrees in remote areas, seek to create access to a general social sciences or liberal studies degree, perhaps through a hybrid instructional method that could involve distance, CD-Rom and other self-study methods, experiential credits, and extension course offerings. This initial effort can lead to expanded program offerings as more job-specific program demands emerge.
 21. Conduct additional polling research to gauge public opinion on the establishment and funding of academic centers in selected locations across the region.
 22. Collaborate with community leaders, business representatives, and educators to develop program priorities to be considered in each county.

Conclusions

In general, data indicate substantial demand throughout the region for a wide variety of programming, particularly four-year degrees. Substantial access barriers must be overcome, particularly in rural areas. The population within the six-county area is expected to grow to 350,000 by the year 2010. Also, numerous employment organizations in the study area are willing to provide higher education incentives to their employees and are interested in partnering with education institutions. If challenges can be addressed, the outlook is favorable for development of expanded higher education opportunities.

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